Phase I licensees authorized on Channels 161-200 and Channels 1-40 will be required to coordinate the addition, removal, or modification of station sites among themselves to avoid interference. Such licensees will also be required to include, in their application for minor modification of their authorization to add, remove, or modify a station site, a certification that the station has been appropriately coordinated. Phase I licensees authorized on Channels 161-200 will be required to coordinate the addition, removal, or modification of station sites with Phase II licensees authorized on Channels 1-40. Such Phase I licensees will also be required to include, in their application for minor modification of their authorization to add, remove, or modify a station site, a certification that the station has been appropriately coordinated. Licensees seeking a waiver of Section 90.729(b) of the Commission's Rules to operate fixed stations in the 221-222 MHz band at a power level of 500 watts ERP will be required to gain the consent for such operation from all affected 220 MHz licensees.

V. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The actions taken in this Memorandum Opinion and Order on Reconsideration are in response to petitions for reconsideration including, we believe, several filed by small businesses. The changes minimize any possible significant economic impact on small entities, while remaining consistent with the objectives of this proceeding.

We grant the petitions of Phase I licensees to the extent of permitting, upon application, modifications to Phase I licensees' authorizations which do not expand their 38 dBu service contour. Phase I licensees also will be permitted to convert their site-by-site licenses to a single license. The deregulatory nature of these steps helps minimize the economic impact of telecommunications regulation on small entities.

By removing the 220 MHz service spectrum efficiency standard, we grant the petition that we eliminate the efficiency standard as applied to paging operations.¹⁷ The deregulatory nature of this step helps to minimize the economic impact of telecommunications regulation on small entities. We considered retaining the standard and exempting paging only, but rejected this course as potentially discouraging the provision of innovative services. We also considered replacing the standard with a more lenient standard that would be made stricter over time, but rejected this course because we believe operators would continue using equipment acquired under the more lenient standard, in which case the later standard would have little effect. We also considered conforming the 220 MHz band spectrum efficiency standard to the standard used in the Refarming proceeding. We concluded, however, that because it applies only to aggregated, contiguous channels, and expires in 2001, the 220 MHz

See paras. 111-149 of the Memorandum Opinion and Order on Reconsideration, supra.

standard touches too few licensees for too short a time to significantly increase equipment development for the refarmed bands.

We also believe that small businesses may be prominent players in developing this spectrum, and these businesses would directly benefit from a flexible spectrum use policy that enables them to respond efficiently to marketplace demand. Given the relatively small amount of spectrum assigned in a 220 MHz license, we think it is reasonable to expect that acquisition of the 220 MHz Phase II licenses may be relatively affordable and therefore this service may be particularly attractive to small businesses.

Consistent with the conclusions reached in the *Part 1 Third Report and Order*, we eliminate installment payment plans for small and very small businesses participating in the 220 M!'z service auction, and increase the level of bidding credits for such entities. We will also amend the Commission's rules to permit auction winners to make their final payments within 10 business days after the applicable deadline, provided that they also pay a late fee of 5 percent of the amount due.

While installment payment plans for small entities in the 220 MHz service are eliminated in the Memorandum Opinion and Order on Reconsideration, the Commission found that better alternatives to assist small businesses as well as ensure provision of new services to the public are to raise bidding credits for existing categories of small entities. The Commission believes that bidding credits of sufficient size will enable small businesses to secure private financing. This suggestion is consistent with the Commission's experience in other auctions in which installment payments were not offered and small entities nevertheless have been successful (e.g., the auction of Wireless Communications Service licenses, for which bidding credits were heightened to accommodate the lack of installment payments). Prior to the Memorandum Opinion and Order on Reconsideration, bidding credits of 10 percent were offered to small businesses and 25 percent to very small businesses. The Commission now offers bidding credits of 25 percent to small businesses and 35 percent to very small businesses. The levels of bidding credits adopted offer a reasonable accommodation for the elimination of installment payments

VI. Report to Congress

We will send a copy of this Supplemental Final Regulatory Flexibility Analysis, along with the Memorandum Opinion and Order on Reconsideration, in a report to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996. In addition,

¹⁸ See paras, 157-164 of the Memorandum Opinion and Order on Reconsideration, supra.

¹⁹ See 5 U.S.C. § 801(a)(1)(A).

the Commission will send a copy of the Memorandum Opinion and Order on Reconsideration, including this Supplemental FRFA, to the Chief Counsel for Advocacy for SBA. A copy of the Memorandum Opinion and Order on Reconsideration and this Supplemental FRFA (or summary thereof) also will be published in the Federal Register.²⁹

²⁰ See 5 U.S.C. § 604(b).

APPENDIX D

Revisions to Commission's Rules

Part 90 of Title 47 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 90 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 303, 309, and 332, unless otherwise noted.

2. Section 90.203 is amended by revising paragraph (k) to read as follows:

Section 90.203 Type acceptance required.

* * * * *

- (k) For transmitters operating on frequencies in the 220-222 MHz band, type acceptance will only be granted for equipment with channel bandwidths up to 5 kHz, except that type acceptance will be granted for equipment operating on 220-222 MHz band Channels 1 through 160 (220.0025 through 220.7975/221.0025 through 221.7975), 171 through 180 (220.8525 through 220.8975/221.8525 through 221.8975), and 186 through 200 (220.9275 through 220.9975/221.9275 through 221.9975) with channel bandwidths greater than 5 kHz.
- 3. Section 90.711 is amended by revising paragraph (a) to read as follows:

Section 90.711 Processing of Phase II applications.

(a) Phase II applications for authorizations on Channels 166 through 170 and Channels 181 through 185 will be processed on a first-come, first-served basis. When multiple applications are filed on the same day for these frequencies in the same geographic area, and insufficient frequencies are available to grant all applications (*i.e.*, if all applications were granted, violation of the station separation provisions of Section 90.723(k) would result), these applications will be considered mutually exclusive and will be subject to random selection procedures pursuant to Section 1.972 of this chapter.

* * * * *

4. Section 90.723 is amended by revising paragraphs (e) and (f), by redesignating paragraphs (g), (h), and (i) as paragraphs (i), (j), and (k), respectively, and by adding paragraphs (g) and (h) to read as follows:

Section 90.723 Selection and assignment of frequencies.

* * * * *

- (e) Phase II licensees authorized on 220-221 MHz frequencies assigned from Sub-band B will be required to geographically separate their base station or fixed station transmitters from the base station or fixed station receivers of Phase I licensees authorized on 221-222 MHz frequencies 200 kHz removed or less in Sub-band A in accordance with the Table in paragraph (d) of this section. Such Phase I licensees will not be required to geographically separate their base station or fixed station transmitters from receivers associated with additional transmitter sites that are added by such Phase I licensees in accordance with the provisions of Section 90.745(a).
- (f) Phase II licensees with base or fixed stations transmitting on 220-221 MHz frequencies assigned from Sub-band B and Phase II licensees with base or fixed stations receiving on Sub-band A 221-222 MHz frequencies, if such transmitting and receiving frequencies are 200 kHz or less removed from one another, will be required to coordinate the location of their base stations or fixed stations to avoid interference and to cooperate to resolve any instances of interference in accordance with the provisions of Section 90.173(b).
- (g) Phase I licensees with base or fixed stations transmitting on 220-221 MHz frequencies assigned from Sub-band B and Phase I licensees with base or fixed stations receiving on Sub-band A 221-222 MHz frequencies (if such transmitting and receiving frequencies are 200 kHz or less removed from one another) that add, remove, or modify station sites in accordance with the provisions of Section 90.745(a) will be required to coordinate such actions with one another to avoid interference and to cooperate to resolve any instances of interference in accordance with the provisions of Section 90.173(b).
- (h) Phase I licensees with base or fixed stations transmitting on 220-221 MHz frequencies assigned from Sub-band B that add, remove, or modify station sites in accordance with the provisions of Section 90.745(a) will be required to coordinate such actions with Phase II licensees with base or fixed stations receiving on Sub-band A 221-222 MHz frequencies 200 kHz or less removed.
- (i) A mobile station is authorized to transmit on any frequency assigned to its associated base station. Mobile units not associated with base stations (see Section 90.720(a)) must operate on "mobile" channels.

- (j) A licensee's fixed station is authorized to transmit on any of the licensee's assigned base station frequencies or mobile station frequencies.
- (k) Except for nationwide assignments, the separation of co-channel Phase I base stations, or fixed stations transmitting on base station frequencies, shall be 120 kilometers. Except for Phase I licensees seeking license modification in accordance with the provisions of Sections 90.751 and 90.753, shorter separations between such stations will be considered by the Commission on a case-by-case basis upon submission of a technical analysis indicating that at least 10 dB protection will be provided to an existing Phase I station's predicted 38 dBu signal level contour shall be calculated using the F(50,50) field strength chart for Channels 7-13 in Section 73.699 (Fig. 10) of this chapter, with a 9 dB correction factor for antenna height differential. The 10 dB protection to the existing Phase I station's predicted 38 dBu signal level contour shall be calculated using the F(50,10) field strength chart for Channels 7-13 in Section 73.699 (Fig. 10a) of this chapter, with a 9 dB correction factor for antenna height differential.
- 5. Section 90.729 is amended by revising paragraphs (b) and (c) to read as follows:

Section 90.729 Limitations on power and antenna height.

* * * * *

- (b) The maximum permissible ERP for mobile units is 50 watts. Portable units are considered as mobile units. Licensees operating fixed stations or paging base stations transmitting on frequencies in the 221-222 MHz band may not operate such fixed stations or paging base stations at power levels greater than 50 watts ERP, and may not transmit from antennas that are higher than 7 meters above average terrain, except that transmissions from antennas that are higher than 7 meters above average terrain will be permitted if the effective radiated power of such transmissions is reduced below 50 watts ERP by 20 log₁₀(h/7) dB, where h is the height above average terrain (HAAT), in meters.
- (c) Base station and fixed station transmissions on base station transmit Channels 196-200 are limited to 2 watts ERP and a maximum antenna HAAT of 6.1 meters (20 ft). Licensees authorized on these channels may operate at power levels above 2 watts ERP or with a maximum antenna HAAT greater than 6.1 meters (20 ft) if:
- (1) They obtain the concurrence of all Phase I and Phase II licensees with base stations or fixed stations receiving on base station receive Channels 1-40 and located within 6 km of their base station or fixed station; and
- (2) Their base station or fixed station is not located in the United States/Mexico or United States/Canada border areas.

6. Section 90.733 is amended by revising paragraphs (d), (e), and (g) to read as follows:

Section 90.733 Permissible operations.

* * * * *

- (d) Licensees, except for licensees authorized on Channels 161 through 170 and 181 through 185, may combine any number of their authorized, contiguous channels (including channels derived from multiple authorizations) to form channels wider than 5 kHz.
- (e) In combining authorized, contiguous channels (including channels derived from multiple authorizations) to form channels wider than 5 kH? the emission limits in Section 90.210(f) must be met only at the outermost edges of the contiguous channels. Transmitters shall be tested to confirm compliance with this requirement with the transmission located as close to the band edges as permitted by the design of the transmitter. The frequency stability requirements in Section 90.213 shall apply only to the outermost of the contiguous channels authorized to the licensee. However, the frequency stability employed for transmissions operating inside the outermost contiguous channels must be such that the emission limits in Section 90.210(f) are met over the temperature and voltage variations prescribed in Section 2.995 of this chapter.

* * * * *

(g) The transmissions of a Phase I non-nationwide licensee's paging base station, or fixed station transmitting on frequencies in the 220-221 MHz band, must meet the requirements of Sections 90.723(d), (g), (h), and (k), and 90.729, and such a station must operate at the effective radiated power and antenna height-above-average-terrain prescribed in the licensee's land mobile base station authorization.

* * * * *

7. Section 90.745 is added to read as follows:

Section 90.745 Phase I licensee service areas.

(a) A Phase I licensee's service area shall be defined by the predicted 38 dBu service contour of its authorized base station or fixed station transmitting on frequencies in the 220-221 MHz band at its initially authorized location or at the location authorized in accordance with §§ 90.751, 90.753, 90.755 and 90.757 if the licensee has sought modification of its

license to relocate its initially authorized base station. The Phase I licensee's predicted 38 dBu service contour is calculated using the F(50,50) field strength chart for Channels 7-13 in Section 73.699 (Fig. 10) of this chapter, with a 9 dB correction factor for antenna height differential, and is based on the authorized effective radiated power (ERP) and antenna height-above-average-terrain of the licensee's base station or fixed station. Phase I licensees are permitted to add, remove, or modify transmitter sites within their existing service area without prior notification to the Commission so long as their predicted 38 dBu service contour is not expanded. The incumbent licensee must, however, notify the Commission within 30 days of the completion of any changes in technical parameters or additional stations constructed through a minor modification of its license. Such notification must be made by submitting the appropriate FCC form and must include the appropriate filing fee, if any. These minor modification applications are not subject to public notice and petition to deny requirements or mutually exclusive applications.

- (b) Phase I licensees holding authorizations for service areas that are contiguous and overlapping may exchange these authorizations for a single license, authorizing operations throughout the contiguous and overlapping service areas. Phase I licensees exercising this license exchange option must submit specific information for each of their external base station sites.
- 8. The section heading of Section 90.769 is revised to read as follows:

Section 90.769 Construction and implementation of Phase II nationwide licenses.

* * * * *

9. The list of sections preceding Section 90.1001 is revised to read as follows:

§ 90.1001	220 MHz service subject to competitive bidding.
§ 90.1003	Competitive bidding design for the 220 MHz service.
§ 90.1005	Competitive bidding mechanism.
§ 90.1007	Withdrawal, default and disqualification payments
§ 90.1009	Bidding application (FCC Form 175 and 175-S short-form).
§ 90.1011	Submission of upfront payments and down payments.
§ 90.1013	Long-form application (FCC Form 601).
§ 90.1015	License grant, denial, default and disqualification.
§ 90.1017	Bidding credits for small businesses and very small businesses.
§ 90.1019	Eligibility for partitioned licenses.
§ 90.1021	Definitions concerning competitive bidding process.

- § 90.1023 Certifications, disclosures, records maintenance and audits.
- § 90.1025 Petitions to deny and limitations on settlements.

10. Section 90.1011 is revised to read as follows:

Section 90.1011 Submission of Upfront Payments and Down Payments.

- (a) The Commission will require applicants to submit an upfront payment prior to the start of a 220 MHz Service auction. The amount of the upfront payment for each geographic area license auctioned and the procedures for submitting it will be set forth by the Wireless Telecommunications Bureau in a Public Notice in accordance with § 1.2106 of this chapter.
- (b) Each winning bidder in a 220 MHz Service auction must submit a down payment to the Commission in an amount sufficient to bring its total deposits up to 20 percent of its winning bid within ten (10) business days following the release of a Public Notice announcing the close of bidding.
- 11. Section 90.1013 is revised to read as follows:

Section 90.1013 Long-form Application (FCC Form 601).

Each successful bidder for a 220 MHz geographic area license must submit a long-form application (FCC Form 601) within ten (10) business days after being notified by Public Notice that it is the winning bidder. Applications for 220 MHz geographic area licenses on FCC Form 601 must be submitted in accordance with § 1.2107 of this chapter, all applicable procedures set forth in the rules in this part, and any applicable Public Notices that the Commission may issue in connection with an auction. After an auction, the Commission will not accept long-form applications for 220 MHz geographic area licenses from anyone other than the auction winners and parties seeking partitioned licenses pursuant to agreements with auction winners under § 90.1019 of this chapter.

12. Section 90.1015 is revised to read as follows:

Section 90.1015 License Grant, Denial, Default, and Disqualification.

(a) Unless otherwise specified by Public Notice, auction winners are required to pay the balance of their winning bids in a lump sum within ten (10) business days following the release of a Public Notice establishing the payment deadline. If a winning bidder fails to pay the balance of its winning bids in a lump sum by the applicable deadline as specified by the Commission, it will be allowed to make payment within ten (10) business days after the payment deadline, provided that it also pays a late fee equal to five percent of the amount due. When a winning bidder fails to pay the balance of its winning bid by the late payment deadline, it is considered to be in default on its license(s) and subject to the applicable default payments. Licenses will be awarded upon the full and timely payment of winning bids and any applicable late fees.

- (b) A bidder that withdraws its bid subsequent to the close of bidding, defaults on a payment due, or is disqualified, is subject to the payments specified in § 1.2104(g), § 1.2109, and § 90.1007 of this chapter, as applicable.
- 13. Section 90.1017 is revised to read as follows:

Section 90,1017 Bidding Credits For Small Businesses and Very Small Businesses.

- (a) Bidding Credits. A winning bidder that qualifies as a small business or a consortium of small businesses as defined in Section 90.1021(b)(1) or Section 90.1021(b)(4) may use a bidding credit of 25 percent to lower the cost of its winning bid. A winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in Section 90.1021(b)(2) or Section 90.1021(b)(4) may use a bidding credit of 35 percent to lower the cost of its winning bid.
 - (b) Unjust Enrichment Bidding Credits.
- (1) If a small business or very small business (as defined in §§ 90.1021(b)(1) and 90.1021(b)(2), respectively) that utilizes a bidding credit under this section seeks to transfer control or assign an authorization to an entity that is not a small business or a very small business, or seeks to make any other change in ownership that would result in the licensee losing eligibility as a small business or very small business, the small business or very small business must seek Commission approval and reimburse the U.S. government for the amount of the bidding credit, plus interest based on the rate for ten year U.S. Treasury obligations applicable on the date the license was granted, as a condition of approval of the assignment, transfer, or other ownership change.
- (2) If a very small business (as defined in § 90.1021(b)(2) that utilizes a bidding credit under this section seeks to transfer control or assign an authorization to a small business meeting the eligibility standards for a lower bidding credit, or seeks to make any other change in ownership that would result in the licensee qualifying for a lower bidding credit under this section, the licensee must seek Commission approval and reimburse the U.S.

government for the difference between the amount of the bidding credit obtained by the licensee and the bidding credit for which the assignee, transferee, or licensee is eligible under this section, plus interest based on the rate for ten year U.S. Treasury obligations applicable on the date the license was granted, as a condition of the approval of such assignment, transfer, or other ownership change.

(3) The amount of payments made pursuant to paragraphs (b)(1) and (b)(2) of this section will be reduced over time as follows: A transfer in the first two years of the license term will result in a forfeiture of 100 percent of the value of the bidding credit (or the difference between the bidding credit obtained by the original licensee and the bidding credit for which the post-transfer licensee is eligible); in year 3 of the license term the payment will be 75 percent; in year 4 the payment will be 50 percent; and in year 5 the payment will be 25 percent, after which there will be no assessment.

Separate Statement of Commissioner Susan Ness

Re: Use of the 220-222 MHz Band, PR Docket No. 89-552

I write separately to repeat my long-held view that the Commission should not change its rules on the eve of a spectrum auction.

I strongly support the policy, embodied in the Omnibus Balanced Budget Act of 1993, of assigning radio spectrum through the use of auctions. But reliance on market mechanisms only works if one pays attention to the realities of the market. Business people don't just show up at an auction, ready to bid; first, they need to formulate business plans and secure financing.

Changing the rules for the service on the eve of the auction throws off business plans. While I understand how circumstances have changed and have no particular objection on the merits to eliminating, on our own initiative, the spectrum efficiency standard for 220 MHz services, I also see no compelling need to eliminate the efficiency standard at the eleventh hour or to further complicate the already tortured history of this band.

With or without a prescribed efficiency standard, as a result of the competitive bidding process, licensees will have an incentive to be efficient in their use of the spectrum. But this change in our rules will inevitably necessitate reevaluation of business plans by potential bidders. Some who planned to bid may no longer be interested. Some who planned not to bid may suddenly wish to, but lack the time to formulate a business plan and to secure financial backing.

The only thing worse than changing the rules of the game right before it is played is to change the rules after the fact, as has also occurred with distressing frequency. Of course, new facts or new thinking may justify adjustments, but at a minimum we need to think carefully about the effects of any changes on the operation of market mechanisms. In my view, we can and should do more to avoid auction-eve -- or post-auction -- changes in our rules.